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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/652,477

08/31/2000

Michael Sokol

023925-00011

2877

32294

7590

06/10/2004

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EXAMINER

NGUYEN, HUNG T

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,477

Applicant(s)

SOKOL ET AL.

Examiner

Hung T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5 & 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahne et al. (U.S. 6,133,844) in view of Naylor (U.S. 5,506,767).

Regarding claim 1, Ahne discloses an apparatus comprising:

- a programmable controller (20) operative to determine a present state of a system based on event signals received from the system, the programmable controller (20) providing a signal representative of the system state [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract];
- a display device / LED (200,220) operative to provide a visual representation of the state of the system in response to the control signal [figs.3-4, col.1, lines 29-56, col.3, lines 52-62 and col.4, lines 32-52].

Ahne does not specifically disclose a technical term as a drive operative to generate a control signal in response to the signal provided by the programmable controller and the system has a plurality of ports for receiving data information from a programmable controller which to program information defining a selected display state associated with each of states of the communication system .

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However, Ahne clearly discloses the programmable controller (20) includes a memory (22) to allow a user to program characteristics of at least one light emitting diode (LED) in order to convey information about the operation status of an apparatus such as a printer [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].

Therefore, it would have been obvious to one having ordinary skill in the art to employ any well known technique such as the claimed programmable controller (20) with the memory (24) to generating a control signal in response to the signal provided by the programmable controller for providing a plurality visual signals relating a particular operational status condition of the printer.

Naylor teaches an electronic system has a plurality of ports (11A-P), with at least one port of the plurality of ports providing at least one event signals, where the at least event signal carries information on a status of the at least one port with respect to transmission and receipt of data by the at least one port which is controlled by a controller (14) [figs.1, 3B-E, col.1, lines 44-66, col.2, lines 9-29 , col.2, line 65 to col.3, line 17 and col.3, lines 37-65].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Naylor in the communication system of Ahne for storing / receiving a plurality the event signals in the plurality of ports and providing at least one of the event signals as desired.

Regarding claim 2, Ahne discloses the programmable controller (20) includes a memory (22) to allow a user to program characteristics of at least one light emitting diode (LED) in order to convey information about the operation status of an apparatus such as a printer [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].

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Regarding claim 3, Ahne discloses a multi bits each bit storing a value of 0 or 1 is cited in figs. 7-10, col.3, lines 34-50 and col.6, lines 5-14.

Regarding claim 5, Ahne discloses an apparatus comprises the display device / LED (200,220) operative to provide a visual representation of the state of the system in response to the control signal [figs.3-4, col.1, lines 29-56, col.3, lines 52-62 and col.4, lines 32-52].

Regarding claim 7, Ahne discloses a method of operating a display system comprising the step of:

- providing event signals (220,220) representative a condition of a system to a programmable controller (20) [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract];
- generating signals representative of system state in response to the event signals (200,220) [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract];
- display a visual representative of information (200,220) representing system state [figs.3-4, col.1, lines 29-56, col.3, lines 52-62 and col.4, lines 32-52];
- providing programming information to the programmable controller (20) [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].

Ahne does not specifically disclose the system has a plurality of ports .

Ports are hardware component devices for receiving data information from a programmable controller which to program information defining a selected display state associated with each of states of the communication system.

Naylor teaches an electronic system has a plurality of ports (11A-P), with at least one port of the plurality of ports providing at least one event signals, where the at least event signal

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carries information on a status of the at least one port with respect to transmission and receipt of data by the at least one port which is controlled by a controller (14) [figs.1, 3B-E, col.1, lines 44-66, col.2, lines 9-29 , col.2, line 65 to col.3, line 17 and col.3, lines 37-65].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Naylor in the communication system of Ahne for storing / receiving a plurality the event signals in the plurality of ports and providing at least one of the event signals as desired.

Regarding claim 8, Ahne discloses a programmable controller (20) for controlling a display device (200,220) based on event information indicative of a current one of a set of predefined states of a communication system(10), comprising:

- a programmable controller (20) responsive to programming information defining a selected associated with each of the states of the communication system (10), the programmable controller being operative to generate a control signal indicative of a current display state (200,220) based on the current of the communication system and the programming information [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].

Regarding claim 9, Ahne discloses a programmable controller (20) for controlling a display device (200,220) based on event information indicative of a current one of a set of predefined states of a communication system(10), comprising:

- a programmable controller (20) responsive to programming information defining a selected associated with each of the states of the communication system (10), the programmable controller being operative to generate a control signal indicative of a current display state (200,220) based on the current of the communication system and the programming information [

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figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].

Ahne does not specifically disclose the system has a plurality of ports .

Ports are hardware component devices for receiving data information from a programmable controller which to program information defining a selected display state associated with each of states of the communication system.

Naylor teaches an electronic system has a plurality of ports (11A-P), with at least one port of the plurality of ports providing at least one event signals, where the at least event signal carries information on a status of the at least one port with respect to transmission and receipt of data by the at least one port which is controlled by a controller (14) [figs.1, 3B-E, col.1, lines 44-66, col.2, lines 9-29 , col.2, line 65 to col.3, line 17 and col.3, lines 37-65].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Naylor in the communication system of Ahne for storing / receiving a plurality the event signals in the plurality of ports and providing at least one of the event signals as desired.

Regarding claim 10, Ahne clearly discloses the programmable controller (20) includes a memory (22) to allow a user to program characteristics of at least one light emitting diode (LED) in order to convey information about the operation status of an apparatus such as a printer [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract];

- the programmable controller (20) responsive to programming information defining a selected associated with each of the states of the communication system (10), the programmable controller being operative to generate a control signal indicative of a current display state (200,220) based on the current of the communication system and the programming information [

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figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].

3. Claims 4 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahne et al. (U.S. 6,133,844) in view of Naylor (U.S. 5,506,767) further in view of Ross et al. (U.S. 5,027,112).

Regarding claim 4, The combination of Ahne & Naylor is still missing the driver comprises an array of tri-state devices and the display comprises array of light emitting diodes, arrange in a matrix.

The array of tri-state devices and the display comprises array of light emitting diodes, arrange in a matrix are used in the system for providing more clearly visual signals to an operator about the status condition of the apparatus.

Ahne does teach a technique of using a tri-state device as on / off / blinking in the LED for displaying the operational status condition of the printer [figs.7-12, col.5, line 54 to col.6, line 67].

Furthermore, Ross teaches a display system comprises a display area defined by an array of light emitting diodes (LED's) which form a matrix having a series of rows and columns [figs.3-4, col.5, lines 6-20].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the system of Ahne as taught by Naylor & Ross includes a matrix feature for determining which state condition is displayed when more than one state condition exists.

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Regarding claim 6, The combination of Ahne & Naylor is still missing the driver comprises an array of tri-state devices and the display comprises array of light emitting diodes, arrange in a matrix.

The array of tri-state devices and the display comprises array of light emitting diodes, arrange in a matrix are used in the system for providing more clearly visual signals to an operator about the status condition of the apparatus.

Ahne does teach a technique of using a tri-state device as on / off / blinking in the LED for displaying the operational status condition of the printer [figs.7-12, col.5, line 54 to col.6, line 67].

Furthermore, Ross teaches a display system comprises a display area defined by an array of light emitting diodes (LED's) which form a matrix having a series of rows and columns [figs.3-4, col.5, lines 6-20].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the system of Ahne as taught by Naylor & Ross includes a matrix feature for determining which state condition is displayed when more than one state condition exists.

Arguments & Responses

4. Applicant's argument filed on April 15, 2004 have been fully considered but they are not persuasive reasons.

Applicant's Arguments:

A) The applicant states that the system of Ahne fails to teach or suggest all of the elements of claims 1-3, 5 and 7-9.

B) The applicant states the system of Naylor does not disclose a plurality of ports, with at least one port of the plurality of ports providing at least one of the event signals, where the at least one event signal carries information on a status of the at least one port with respect to transmission and receipt of data by the at least one port.

C) Both references of Ahne and Naylor fail to disclose all limitation in claims.

Response to the arguments:

A) Ahne discloses **at least two elements** as a programmable controller (20) for controlling a display device (200,220) based on event information indicative of a current one of a set of predefined states of a communication system(10), comprising:

- a programmable controller (20) responsive to programming information defining a selected associated with each of the states of the communication system (10), the programmable controller being operative to generate a control signal indicative of a current display state (200,220) based on the current of the communication system and the programming information [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].
- display a visual representative of information (200,220) representing system state [figs.3-4, col.1, lines 29-56, col.3, lines 52-62 and col.4, lines 32-52].

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B) Naylor teaches an electronic system has a plurality of ports (11A-P), with at least one port of the plurality of ports providing at least one event signals, where the at least event signal carries information on a status of the at least one port with respect to transmission and receipt of data by the at least one port which is controlled by a controller (14) [figs.1, 3B-E, col.1, lines 44-66, col.2, lines 9-29 , col.2, line 65 to col.3, line 17 and col.3, lines 37-65].

C) The references of Ahne & Naylor are both directed to the electronic displaying system which can be combined to reject all limitations in a plurality of claims in the following:

Regarding claims 1, 7 & 9, Ahne discloses an apparatus comprising:

- a programmable controller (20) operative to determine a present state of a system based on event signals received from the system, the programmable controller (20) providing a signal representative of the system state [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract];
- a display device / LED (200,220) operative to provide a visual representation of the state of the system in response to the control signal [figs.3-4, col.1, lines 29-56, col.3, lines 52-62 and col.4, lines 32-52].

Ahne does not specifically disclose a technical term as a drive operative to generate a control signal in response to the signal provided by the programmable controller and the system has a plurality of ports for receiving data information from a programmable controller which to program information defining a selected display state associated with each of states of the communication system.

However, Ahne clearly discloses the programmable controller (20) includes a memory (22) to allow a user to program characteristics of at least one light emitting diode (LED) in order

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to convey information about the operation status of an apparatus such as a printer [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].

Therefore, it would have been obvious to one having ordinary skill in the art to employ any well known technique such as the claimed programmable controller (20) with the memory (24) to generating a control signal in response to the signal provided by the programmable controller for providing a plurality visual signals relating a particular operational status condition of the printer.

Naylor teaches an electronic system has a plurality of ports (11A-P), with at least one port of the plurality of ports providing at least one event signals, where the at least event signal carries information on a status of the at least one port with respect to transmission and receipt of data by the at least one port which is controlled by a controller (14) [figs.1, 3B-E, col.1, lines 44-66, col.2, lines 9-29 , col.2, line 65 to col.3, line 17 and col.3, lines 37-65].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Naylor in the communication system of Ahne for storing / receiving a plurality the event signals in the plurality of ports and providing at least one of the event signals as desired.

Regarding claim 2, Ahne discloses the programmable controller (20) includes a memory (22) to allow a user to program characteristics of at least one light emitting diode (LED) in order to convey information about the operation status of an apparatus such as a printer [figs.3-6, col.1, lines 29-56 , col.2, line 62 to col.3, line 5, col.3, lines 52-60 col.4, lines 32-52 and abstract].

Regarding claim 3, Ahne discloses a multi bits each bit storing a value of 0 or 1 is cited in figs. 7-10, col.3, lines 34-50 and col.6, lines 5-14.

Regarding claim 5, Ahne discloses an apparatus comprises the display device / LED (200,220) operative to provide a visual representation of the state of the system in response to the control signal [figs.3-4, col.1, lines 29-56, col.3, lines 52-62 and col.4, lines 32-52].

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTHS shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (703) 308-6796. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

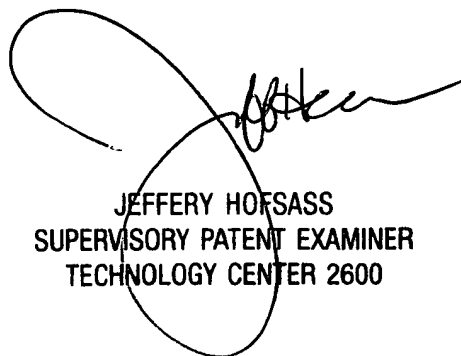
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (703) 305-4717. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Examiner: Hung T. Nguyen

Date: June 3, 2004



JEFFERY HOF SASS
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